

AMENDMENTS IN THE CLAIMS

1. (Previously Presented) In a hardware description language (HDL) batch simulation farm having multiple simulation clients coupled to an instrumentation server, a method for providing centralized access to trends in count event data, wherein the count event data represents sequences of signal values that indicate the occurrence of events triggered during simulation testing of HDL models by the simulation clients, said method comprising:

utilizing said instrumentation server to:

receive a first set of count event data for a first simulation test of an HDL model;

generate a first counter report from the first set of count event data, wherein the first counter report specifies a number of occurrences of one or more count events for the first simulation test and further specifies a number of simulation cycles over which the first simulation test was processed;

receive a second set of count event data for a second simulation test of the HDL model;

generate a second counter report from the second set of count event data, wherein the second counter report specifies a number of occurrences of one or more count events for the second simulation test and further specifies a number of simulation cycles over which the second simulation test was processed;

compare said first counter report to said second counter report to detect variations in rates of occurrences of count events recorded in the first and second counter reports, said comparing including:

utilizing the specified number of simulation cycles specified by said first counter report and the specified number of simulation cycles specified by the second counter report to normalize the number of count event occurrences specified by said first counter report with respect to the number of count event occurrences specified by said second counter report; and

determining the difference in the normalized numbers of occurrences of corresponding count events specified by said first counter report and said second counter report; and

generate a counter difference report that specifies one or more count events for which the determined difference in the normalized numbers of occurrences of corresponding count events exceeds a pre-specified difference threshold.

2. (Previously Presented) The method of claim 1, further comprising:
executing a testcase using said HDL simulation model within said one or more simulation clients;
receiving an aggregate count event packet from said one or more simulation clients, wherein said aggregate count event packet includes count event data recorded during said testcase; and
within said instrumentation server, storing said count event data within count data storage files.
3. (Previously Presented) The method of claim 2, wherein said first and second counter reports are generated as output from count event queries processed with respect to said count data storage files.
4. (Previously Presented) The method of claim 2, wherein said first and second counter reports are generated directly from said counter data storage files.
5. (Previously Presented) The method of claim 1, wherein said first and second counter reports each include a simulator cycle count value that specifies the number of simulation cycles over which simulation testing was processed, said normalizing the number of count event occurrences specified by said first counter report with respect to the number of count event occurrences specified by said second counter report further comprising, computing a count normalization factor that is a ratio of the values of the simulator cycle count values contained in said first and second counter reports.

6. (Currently Amended) In a hardware description language (HDL) batch simulation farm having multiple simulation clients coupled to an instrumentation server, a system for providing centralized access to trends in count event data, wherein the count event data represents sequences of signal values that indicate the occurrence of events triggered during simulation testing of HDL models by the simulation clients, said system comprising:

means within said instrumentation server for

receiving a first set of count event data for a first simulation test of an HDL model;

means within said instrumentation server for generating a first counter report from the first set of count event data, wherein the first counter report specifies a number of occurrences of one or more count events for the first simulation test and further specifies a number of simulation cycles over which the first simulation test was processed;

means within said instrumentation server for receiving a second set of count event data for a second simulation test of the HDL model;

means within said instrumentation server for generating a second counter report from the second set of count event data, wherein the second counter report specifies a number of occurrences of one or more count events for the second simulation test and further specifies a number of simulation cycles over which the second simulation test was processed;

means within said instrumentation server for comparing said first counter report to said second counter report to detect variations in rates of occurrences of count events recorded in the first and second counter reports, said comparing including:

utilizing the specified number of simulation cycles specified by said first counter report and the specified number of simulation cycles specified by the second counter report to normalize the number of count event occurrences specified by said first counter report with respect to the number of count event occurrences specified by said second counter report; and

determining the difference in the normalized numbers of occurrences of corresponding count events specified by said first counter report and said second counter report; and

means within said instrumentation server for generating a counter difference report that specifies one or more count events for which the determined difference in the normalized numbers of occurrences of corresponding count events exceeds a pre-specified difference threshold.

7. (Previously Presented) The system of claim 6, further comprising:

means for executing a testcase using said HDL simulation model within said one or more simulation clients;

means for receiving an aggregate count event packet from said one or more simulation clients, wherein said aggregate count event packet includes count event data recorded during said testcase; and

means within said instrumentation server for storing said count event data within count data storage files.

8. (Previously Presented) The system of claim 7, wherein said first and second counter reports are generated as output from count event queries processed with respect to said count data storage files.

9. (Previously Presented) The system of claim 7, wherein said first and second counter reports are generated directly from said counter data storage files.

10. (Previously Presented) The system of claim 6, wherein said first and second counter reports each include a simulator cycle count value that specifies the number of simulation cycles over which simulation testing was processed, said means for normalizing the number of count event occurrences specified by said first counter report with respect to the number of count event occurrences specified by said second counter report further comprising means for computing a count normalization factor that is a ratio of the values of the simulator cycle count values contained in said first and second counter reports.

11. (Currently Amended) ~~A tangible computer readable medium having encoded thereon in data storage media, computer executable instructions~~ computer program product for, within a

hardware description language (HDL) batch simulation farm having multiple simulation clients coupled to an instrumentation server, providing centralized access to trends in count event data, wherein the count event data represents sequences of signal values that indicate the occurrence of events triggered during simulation testing of HDL models by the simulation clients, said ~~computer-executable instructions adapted for performing a method~~ computer program product comprising:

a tangible computer-readable medium having encoded thereon in data storage media, computer-executable instructions adapted for performing a method including:

receiving count event data for a first simulation test of an HDL model;

generating a first counter report from the first set of count event data, wherein the first counter report specifies a number of occurrences of one or more count events for the first simulation test and further specifies a number of simulation cycles over which the first simulation test was processed;

receiving a second set of count event data for a second simulation test of the HDL model;

generating a second counter report from the second set of count event data, wherein the second counter report specifies a number of occurrences of one or more count events for the second simulation test and further specifies a number of simulation cycles over which the second simulation test was processed;

comparing said first counter report to said second counter report to detect variations in rates of occurrences of count events recorded in the first and second counter reports, said comparing including:

utilizing the specified number of simulation cycles specified by said first counter report and the specified number of simulation cycles specified by the second counter report to normalize the number of count event occurrences specified by said first counter report with respect to the number of count event occurrences specified by said second counter report; and

determining the difference in the normalized numbers of occurrences of corresponding count events specified by said first counter report and said second counter report; and

generating a counter difference report that specifies one or more count events for which the determined difference in the normalized numbers of occurrences of corresponding count events exceeds a pre-specified difference threshold.

12. (Currently Amended) The ~~computer-readable-medium~~ computer program product of claim 11, said method further comprising:

executing a testcase using said HDL simulation model within said one or more simulation clients;

receiving an aggregate count event packet from said one or more simulation clients, wherein said aggregate count event packet includes count event data recorded during said testcase; and

within said instrumentation server, storing said count event data within count data storage files.

13. (Currently Amended) The ~~computer-readable-medium~~ computer program product of claim 12, wherein said first and second counter reports are generated as output from count event queries processed with respect to said count data storage files.

14. (Currently Amended) The ~~computer-readable-medium~~ computer program product of claim 12, wherein said first and second counter reports are generated directly from said counter data storage files.

15. (Currently Amended) The ~~computer-readable-medium~~ computer program product of claim 11, wherein said first and second counter reports each include a simulator cycle count value that specifies the number of simulation cycles over which simulation testing was processed, said normalizing the number of count event occurrences specified by said first counter report with respect to the number of count event occurrences specified by said second counter report further comprising, computing a count normalization factor that is a ration of the values of the simulator cycle count field values contained in said first and second counter reports.